

Please amend claim 1 as follows:

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- A/
1. (once amended) A method of detecting and analysing differences between nucleic acids from two sources, which method comprises:
- a. providing the nucleic acids from two sources as labelled probes wherein the nucleic acids from two sources are labelled with two different markers;
  - b. forming a mixture of the labelled probes with pooled reagents wherein each of the pooled reagents comprises[reagent is] a population of beads carrying a polynucleotide target, the polynucleotide target of any one of the pooled reagents[reagent] being different from the target of [another reagent,]any other of the pooled reagents and the beads of any one of the pooled reagents[reagent] being distinguishable from the beads of [another reagent]any other of the pooled reagents;
  - c. incubating the mixture under conditions to promote specific hybridisation between probes and targets; and
  - d. analysing beads in the mixture by flow cytometry.
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Please amend claim 3 as follows:

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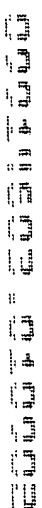
- H2
3. (once amended) The method of claim 1 [ or claim 2] wherein the polynucleotide targets are cDNA derived from cellular mRNA.

Please amend claim 4 as follows:

4. (once amended) The method of [any one of claims 1 to 3]claim 1 wherein the polynucleotide targets are PCR amplimers.

 Please amend claim 5 as follows:

5. (once amended) The method of [any one of claims 1 to 4]claim 1 wherein the polynucleotide targets [carry]contain terminal biotin groups through which they are attached to streptavidin-coated beads.

 Please amend claim 6 as follows:

6. (once amended) The method of [any one of claims 1 to 5]claim 1 wherein the polynucleotide targets are single-stranded nucleic acids.

Please amend claim 7 as follows:

7. (once amended) The method of [any one of claims 1 to 6]claim 1 wherein the [labelled probes]nucleic acids are single-stranded nucleic acids.

Please amend claim 8 as follows:

8. (once amended) The method of [any one of claims 1 to 7]claim 1 wherein beads of one pooled reagent are distinguishable from beads of another pooled reagent by size.

Please amend claim 9 as follows:

9. (once amended) The method of [any one of claims 1 to 8]claim 1 wherein beads of one pooled reagent are distinguishable from beads of another pooled reagent by the nature of [the]one or more markers attached to the beads.

Please amend claim 10 as follows:

10. (once amended) The method of [any one of claims 1 to 9]claim 1 wherein beads of one pooled reagent are distinguishable from beads of another pooled reagent by the concentration of one or more markers attached to the beads.

Please amend claim 11 as follows:

11. (once amended) The method of [any one of claims 1 to 7]claim 1 wherein beads

of one pooled reagent are distinguishable from beads of another pooled reagent by the size and/or by the nature [and/or]and the concentration of one or more markers attached to the beads.

Please amend claim 12 as follows:

12. (once amended) The method of [any one of claims 8 to 11]claim 9 wherein the markers are fluorescent markers [are ]attached to the beads.

Please amend claim 13 as follows:

13. (once amended) The method of claim1[ or claim 2] wherein each [probe]of the nucleic acids is labelled with a fluorescent tag to indicate its source.

Please amend claim 14 as follows:

14. (once amended) The method of [any one of claims 1 to 13]claim 1 wherein the analysis by flow cytometry is performed to identify each bead and to quantify the probes bound thereto.

Please amend claim 15 as follows:

15. (once amended) The method of [any one of claims 1 to 14]claim 1  
[wherein]further comprising the step of analysing the data obtained by flow  
cytometry [is analysed ]to yield information about the relative and/or absolute  
abundances of individual nucleic acid sequences [of]contained within the nucleic  
acids from [the ]two sources.

Please add new claim 16 as follows:

16. (new) The method of claim 10 wherein the markers are fluorescent markers  
attached to the beads.

Please add new claim 17 as follows:

17. (new) The method of claim 11 wherein the markers are fluorescent markers  
attached to the beads.

### **Remarks**

Claims 1-15 are pending in the instant application. Applicants have amended